

Serial No.: 10/032,403  
Group Art Unit No.: 1625

### REMARKS

Claims 13-22 are pending and subject to restriction in the above-identified application. Claims 1-12 were cancelled in a December 20, 2001 Preliminary Amendment.

Applicants request consideration and entry into the record of the following amendments and remarks.

#### Restriction/Election

In summary, the Examiner has required restriction of the present invention to one of three groups, identified as Groups I to III in the September 3, 2004 Restriction Requirement Office Action, and a corresponding species election.

- Group I: claim(s) 13-22 in part, drawn to a compound wherein one of Z1-Z3 is N and Z4 and Z5 are CH, i.e. a naphthyridine compound, the composition and method of use.
- Group II: claim(s) 13-22 in part, drawn to a compound wherein Z5 is N, Z1-Z4 are CH, i.e. a quinoxaline compound, the composition and method of use thereof.
- Group III: claim(s) 13-22 in part, drawn to a compound wherein one of Z4 is N, Z1-Z4 are CH, i.e. a phthalazine compound, the composition and method of use thereof.

In light of the above and to be fully responsive to the September 3, 2004 restriction requirement, applicants provisionally elect, with traverse, to prosecute:

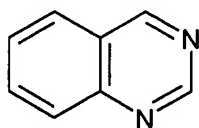
- [1] Group I, claims 13-22 in part, drawn to a compound wherein one of Z1-Z3 is N, and Z4 and Z5 are CH, i.e. which includes naphthyridine compounds; and
- [2] the species identified as 1-Heptyl-4-[6-Methoxy-1,5-Naphthyridin-4-yl)-Aminocarbonyl Piperidine (see, Example 3 at page 19, lines 30-36 to page 21, lines 1-25 of the specification).

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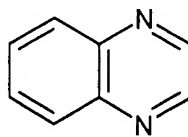
For the record, applicants respectfully wish to point out several inconsistencies in the restriction requirement groupings.

Specifically, the September 3, 2004 Restriction Requirement incorrectly defines the chemical compound structure nomenclature associated with compounds of the present invention.

Group II is directed to quinazoline compounds, where Z5 is N, Z1-Z4 are CH, and not quinoxaline compounds.

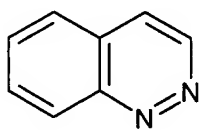


Quinazoline

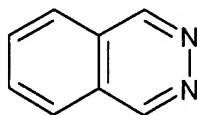


Quinoxaline

Group III is directed to cinnoline compounds, where Z4 is N, **Z1-Z3 and Z5 are CH**, and not phthalazine compounds, where Z4 = N and **Z1-Z4 = CH**.



Cinnoline



Phthalazine

In light of the foregoing, the Examiner indicated a restriction was required under PCT Rules 13.1 and 13.2, as the claimed inventions of Groups I-III do not relate to a single general inventive concept for lacking the same or corresponding special technical features that define a contribution over the prior art.

In particular, the Examiner maintains that naphthyridine compounds of Group I, quinazoline compounds of Group II, and cinnoline compounds of Group III would not have been of sufficient structural similarity to allow for the Markush grouping exhibiting utility, absent some teaching of equivalence in the prior art.

Applicants respectfully traverse for the following reasons:

PCT Rule 13.1 states that the international application shall relate to one invention only or to a group of inventions so linked as to form a single general concept (i.e., "requirement of unity of invention").

PCT Rule 13.2 states that unity of invention shall be fulfilled "when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features". It further defines "special technical features" as "those technical features

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that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art".

In light of this, claims of the present invention define a different chemical compound structure set, do not lack unity under PCT Rule 13.1 and 13.2, but have a "significant structural element" qualifying as a "special technical feature" that defines a contribution over the prior art.

Patentably distinct inventions do not lack unity of invention as long as they derive from the same inventive concept. What is required for a holding of lack of unity is that the inventions be truly "independent". This is the standard for lack of unity applied by the court in *In re Harnish*, 206 USPQ 300, 306 (CCPA 1980) ("unity of invention" ... appl[ies] where *unrelated* inventions are involved") (emphasis supplied). Independent, as defined in MPEP § 802.01, "means that there is no disclosed relationships between the two or more subjects disclosed, that is, they are unconnected in design, operation or effect".

While applicants do not contend that the compounds of the remaining claims are not patentably distinct, the present compounds are so connected as to have arisen from a singular research effort with common shared properties.

Accordingly, claims 13-22 of the present invention read upon a plurality of distinct, but related inventions and fully comply with the unity of invention requirement according to the PCT. They cannot, therefore, be further subdivided or restricted and must be included in a single application.

Applicants also indicate that the single mode of action of the compounds of the present invention as antibacterial agents further supports examination of compounds, compositions and methods of use in a single application.

Applicants further note that lack of unity under PCT rules 13.1 and 13.2 were not held during either PCT examination in identical corresponding applications to the present inventions.

Thus, given the limited scope of the genus as described above, the compound claims of the present invention should be considered in a single application.

Therefore, applicants respectfully request that the Examiner withdraw the restriction requirement.

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**CONCLUSION**

In view of the above amendments and remarks, applicants believe that the claims of the present application are in condition for allowance and is earnestly solicited .

If any additional fees or charges are required authorization is hereby granted to charge any necessary fees to Deposit Account No. 19-2570 accordingly.

Should the Examiner have any questions or wish to discuss any aspect of this case, the Examiner is encouraged to call the undersigned attorney at the number below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Grace Hsu", is written over a horizontal line.

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